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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/803,835 | 03/18/2004 | Reid Baldwin | 81072970 | 6455 |
| 28866 | 7590 | 11/02/2005 | | |
| MACMILLAN, SOBANSKI & TODD, LLC ONE MARITIME PLAZA - FOURTH FLOOR 720 WATER STREET TOLEDO, OH 43604 | | | EXAMINER PANG, ROGER L | |
| | | | ART UNIT 3681 | PAPER NUMBER |

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/803,835 | Applicant(s) BALDWIN ET AL. | |
| | Examiner Roger L. Pang | Art Unit 3681 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to the election filed for application 10/803,835 on October 5, 2005.

Election/Restrictions

Applicant's election without traverse of Transmission 1 in the reply filed on October 5, 2005 is acknowledged.

Claim Objections

Claim 16 is objected to because of the following informalities: on line 1, "wherein" should be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 11, the dependency should be upon claim 9. With regard to claim 18, the dependency should be upon claim 16.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowen

‘425. With regard to claim 1, Bowen teaches a multiple speed ratio power transmission, comprising: an input 44 supported for rotation; a first layshaft 58/54 supported for rotation; a second layshaft 54/58 supported for rotation; a first power path via 82/100 for transmitting power between the input and first layshaft, and producing a first ratio of a speed of the first layshaft and a speed of the input; a second power path via 100/82 for transmitting power between the input and second layshaft, and producing a second ratio of a speed of the second layshaft and a speed of the input; a clutch 16/14 for driveably connecting and disconnecting the input and the first power path; an output 29 supported for rotation; and a coupler 114 for driveably connecting and disconnecting the output and the input. With regard to claim 3, Bowen teaches the transmission, wherein the second ratio is less than the first ratio (Fig. 1). With regard to claim 4, Bowen teaches the transmission, wherein: the first power path comprises a first pinion 82 driveably connected to the input, and a first gear 60 driveably connected to the first layshaft, in meshing engagement with the first pinion; and the second power path comprises a second pinion 100 driveably connected to the input, and a second gear 102 driveably connected to the second

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layshaft, in meshing engagement with the second pinion. With regard to claim 5, Bowen teaches the transmission, wherein the second ratio is less than the first ratio (Fig. 1). With regard to claim 6, Bowen teaches the transmission, wherein: the first power path comprises a first pinion 82 driveably connected to the input, and a first gear 84 driveably connected to the first layshaft, in meshing engagement with the first pinion; and the coupler 114 driveably connects and disconnects alternately the output and the first pinion. With regard to claim 7, Bowen teaches the transmission, wherein: the second power path comprises a second pinion 82 driveably connected to the input, and a second gear 84 driveably connected to the second layshaft, in meshing engagement with the second pinion; and the coupler 114 driveably connects and disconnects alternately the output and the second pinion.

Claims 1-5, 8, 10, 12-15, 17, and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Fisher '188. With regard to claim 1, Fisher teaches a multiple speed ratio power transmission, comprising: an input 10 supported for rotation; a first layshaft 92 supported for rotation; a second layshaft 62 supported for rotation; a first power path via 58 for transmitting power between the input and first layshaft, and producing a first ratio of a speed of the first layshaft and a speed of the input; a second power path via 54 for transmitting power between the input and second layshaft, and producing a second ratio of a speed of the second layshaft and a speed of the input; a clutch 22 for driveably connecting and disconnecting the input and the first power path; an output 124 supported for rotation; and a coupler 100 for driveably connecting and disconnecting the output and the input. With regard to claim 2, Fisher teaches the transmission, further comprising: a one-way drive connection 118 between the second layshaft and the input. With regard to claim 3, Fisher teaches the transmission, wherein the second ratio is less than the

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first ratio (Fig. 2). With regard to claim 4, Fisher teaches the transmission, wherein: the first power path comprises a first pinion 58 driveably connected to the input, and a first gear 98 driveably connected to the first layshaft, in meshing engagement with the first pinion; and the second power path comprises a second pinion 54 driveably connected to the input, and a second gear 64 driveably connected to the second layshaft, in meshing engagement with the second pinion. With regard to claim 5, Fisher teaches the transmission, wherein the second ratio is less than the first ratio (Fig. 2). With regard to claims 8, and 15, Fisher teaches a multiple speed power transmission for motor vehicles, comprising: an input 10; a first layshaft 92 supported for rotation; a second layshaft 62 supported for rotation; a first power path via 58 for transmitting power between the input and first layshaft, and producing a first ratio of a speed of the first layshaft and a speed of the input; a second power path via 54 for transmitting power through a one-way drive 118 connection between the input and second layshaft, and producing a second ratio of a speed of the second layshaft and a speed of the input; a clutch 22 for driveably connecting and disconnecting the input and the first power path; an output 124 supported for rotation; and a first coupler 108 for driveably connecting and disconnecting the output and the second power path (first coupler 82 for connecting and disconnecting the output and the first power path. With regard to claims 10 and 17, Fisher teaches the transmission, wherein the one-way drive connection 118 is a member of the group consisting of a one-way clutch, a sprag one-way clutch, a roller-one-way clutch, a mechanical diode, and a hydraulically actuated friction clutch having an engaged state wherein the second layshaft and input are driveably connected and a disengaged state wherein the second layshaft and input are driveably disconnected. With regard to claims 12 and 19, Fisher teaches the transmission, wherein the clutch 22 is a friction

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clutch. With regard to claims 13 and 20, Fisher teaches the transmission, wherein: the first power path comprises a third pinion 58 driveably connected to the input, and a third gear 98 supported on the first layshaft in meshing engagement with said third pinion; and the second power path comprises a one-way clutch 118 driveably connected to the input, a fourth pinion 54 driveably connected to the one-way clutch, and a fourth gear 64 supported on the second layshaft in meshing engagement with said fourth pinion. With regard to claims 14 and 21, Fisher teaches the transmission, wherein the second speed ratio is less than the first speed ratio (Fig. 2).

Claims 8-10, 12, 15-17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Akashi '908. With regard to claims 8, and 15, Akashi teaches a multiple speed power transmission for motor vehicles, comprising: an input 101; a first layshaft 1 supported for rotation; a second layshaft 2 supported for rotation; a first power path for transmitting power between the input and first layshaft, and producing a first ratio of a speed of the first layshaft and a speed of the input (Fig. 1); a second power path for transmitting power through a one-way drive 14 connection between the input and second layshaft, and producing a second ratio of a speed of the second layshaft and a speed of the input (Fig. 2); a clutch 5 for driveably connecting and disconnecting the input and the first power path; an output 3 supported for rotation; and a first coupler 15 for driveably connecting and disconnecting the output and the second power path (first coupler 7 for connecting and disconnecting the output and the first power path). With regard to claims 9 and 16, Akashi teaches the transmission, further comprising a first pinion 17 supported on the first layshaft; a second pinion 20 supported on the second layshaft; a first gear 22 supported on the output shaft, in meshing engagement with the first pinion and second pinion; a second coupler 32 for connecting and disconnecting alternately the first pinion and first

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layshaft; and a third coupler 40 for connecting and disconnecting alternately the second pinion and second layshaft. With regard to claims 10 and 17, Akashi teaches the transmission, wherein the one-way drive connection 14 is a member of the group consisting of a one-way clutch, a sprag one-way clutch, a roller-one-way clutch, a mechanical diode, and a hydraulically actuated friction clutch having an engaged state wherein the second layshaft and input are driveably connected and a disengaged state wherein the second layshaft and input are driveably disconnected (Fig. 1). With regard to claims 12 and 19, Akashi teaches the transmission, wherein the clutch 7 is a friction clutch.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akashi in view of Sherman '173. Akashi teaches transmission, wherein each of the second coupler and third coupler is a member of a group consisting of a synchronizer and a dog clutch (Fig. 1), but lacks the teaching of the first coupler consisting of a synchronizer and a dog clutch. Sherman teaches that a friction clutch and dog clutch are interchangeable (Col . 7). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Akashi to employ a dog clutch for said first coupler in view of Sherman in order to provide a mechanically simpler clutching means.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Janson, Wehking, and Fisher '621 have been cited to show similar transmissions.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. The central facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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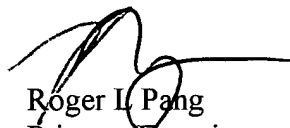
If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L. Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L. Pang
Primary Examiner
Art Unit 3681

October 28, 2005